

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended): A sheet extrudate with at least one surface which has self-cleaning properties,

wherein

a the synthetic polymer surface of the sheet extrudate (X) has at least one securely anchored layer of microparticles (P) which have hydrophobic properties and have from primary particles combined to give agglomerates or aggregates whose size is from 0.2 to 100  $\mu\text{m}$ , which form elevations having an average height of from 20 nm to 25  $\mu\text{m}$  and an average separation of from 20 nm to 25  $\mu\text{m}$ , where the microparticles (P) have been directly anchored within the synthetic polymer surface (X) and have not been linked via a carrier material.

2. (Original): The sheet extrudate as claimed in claim 1,

wherein

the elevations have an average height of from 50 nm to 4  $\mu\text{m}$  and/or an average separation of from 50 nm to 4  $\mu\text{m}$ .

3. (Currently Amended): The sheet extrudate as claimed in claim 1 ~~or 2~~,

wherein

the microparticles have been selected from particles of silicates, minerals, metal oxides, metal powders, silicas, pigments, ~~and~~ or polymers.

4. (Currently Amended): The sheet extrudate as claimed in ~~any of claims 1 to 3~~  
claim 1,

wherein

the microparticles have been selected from particles of fumed silicas, precipitated silicas, aluminum oxide, mixed oxides, doped silicates, titanium dioxides, ~~and~~ or pulverulent polymers.

5. (Original): The sheet extrudate as claimed in claim 4,

wherein

the microparticles are hydrophobicized fumed silicas.

6. (Currently Amended): The sheet extrudate as claimed in ~~any of claims 1 to 5~~  
claim 1,

wherein

the sheet extrudate itself comprises a material selected from polycarbonates, polyoxymethylenes, polyacrylates, polymethacrylates, polyamides, polyvinyl chloride, polyethylenes, polypropylenes, aliphatic linear or branched polyalkenes, cyclic polyalkenes, polystyrenes, polyesters, polyacrylonitrile, polyalkylene terephthalates, and polyvinylidene fluoride, or comprises other polymers from polyisobutene, poly-4-methyl-1-pentene, and polynorbornene, in the form of homo- or copolymer, or else comprises a mixture of these.

7. (Currently Amended): The sheet extrudate as claimed in ~~any of claims 1 to 6~~  
claim 1,

wherein

the microparticles have been anchored with from 10 to 90% of their average particle diameter within the surface.

8. (Currently Amended): A process for producing sheet extrudates as claimed in ~~any of claims 1 to 7~~ claim 1, with at least one surface which has self-cleaning properties and has elevations formed by microparticles,

which comprises

impressing microparticles which have hydrophobic properties and have combined from primary particles to give agglomerates or aggregates whose size is from 0.2 to 100  $\mu\text{m}$ , by means of a roll, into the surface of the melt of a sheet extrudate, where this melt has not yet solidified, and where more than 50% of the microparticles are impressed only to the extent of 90% of their diameter into the surface of the sheet extrudate.

9. (Original): The process as claimed in claim 8,

wherein

the sheet extrudate comprises a polymer based on polycarbonates, on polyoxymethylenes, on polyacrylates, on polymethacrylates, on polyamides, on polyvinyl chloride, on polyethylenes, on polypropylenes, on aliphatic linear or branched polyalkenes, on cyclic polyalkenes, on polystyrenes, on polyesters, on polyacrylonitrile, or on polyalkylene terephthalates, or on polyvinylidene fluoride, or comprises other polymers from polyisobutene, poly-4-methyl-1-pentene, and polynorbornene, in the form of homo- or copolymer, or else comprises a mixture of these.

10. (Currently Amended): The process as claimed in claim 8 ~~or 9~~,  
wherein  
the microparticles are impressed into the surface of the sheet extrudate by means of a  
roll for smoothing the sheet extrudate.

11. (Currently Amended): The process as claimed in ~~any of claims 8 to 10~~ claim 8,  
wherein,  
prior to impression into the sheet extrudate, the microparticles are applied to the  
surface of the roll used to impress the microparticles.

12. (Original): The process as claimed in claim 11,  
wherein  
the microparticles are sprayed onto the roll.

13. (Currently Amended): The process as claimed in ~~at least one of claims 8 to 12~~  
claim 8,  
wherein  
the roll has a temperature of from 20 to 150°C.

14. (Currently Amended): The process as claimed in ~~at least one of claims 8 to 13~~  
claim 8,  
wherein  
use is made of at least two rolls, and hydrophobic microparticles are impressed into  
the surface of the sheet extrudate on two sides of the sheet extrudate.

15. (Currently Amended): The process as claimed in ~~at least one of claims 8 to 14~~  
claim 8,

wherein

use is made of microparticles selected from silicates, minerals, metal oxides, metal  
powders, silicas, pigments, and or polymers.

16. (Original): The process as claimed in claim 15,

wherein

microparticles composed of hydrophobicized fumed silicas are used.

17. (Currently Amended): A film with a surface which has self-cleaning properties  
and has surface structures with elevations, ~~the production process being as claimed in any of~~  
~~claims 8 to 16~~ produced by the process of claim 8.

18. (Currently Amended): A sheet with a surface which has self-cleaning properties  
and has surface structures with elevations, ~~the production process being as claimed in any of~~  
~~claims 8 to 16~~ produced by the process of claim 8.

19. (New): The sheet extrudate as claimed in claim 2,

wherein

the microparticles have been selected from particles of silicates, minerals, metal  
oxides, metal powders, silicas, pigments, or polymers.

20. (New): The sheet extrudate as claimed in claim 2,

wherein

the microparticles have been selected from particles of fumed silicas, precipitated silicas, aluminum oxide, mixed oxides, doped silicates, titanium dioxides, or pulverulent polymers.